

CLAIMS:

What is claimed is: .

1. A method for forming an integrated circuit radio frequency transceiver with reduced
5 harmonic interference from undesired coupling, comprising:

producing a sample of the integrated circuit radio frequency transceiver, the step of
producing the sample further including:

10 forming a plurality of traces on a top metal layer; and

forming a shorted resistive block in line with at least one trace of the plurality of traces;

evaluating real performance of the sample of the integrated circuit radio frequency transceiver;

15 determining whether harmonic interference may need to be reduced;

selecting a first trace of the at least one trace and removing a short across at least one shorted
resistor of the resistive block to form an unshorted resistive block; and

20 producing the integrated circuit radio frequency transceiver with the unshorted resistive block.

2. The method of claim 1 further including evaluating real performance of the sample with
the removed short of the unshorted resistive block.

3. The method of claim 2 further including evaluating real performance of the sample with the removed short of the unshorted resistive block.

4. The method of claim 2 further including selecting a second trace of the at least one trace and removing a short across at least one shorted resistive block of the second trace to form an unshorted resistive block of the second trace.

5. The method of claim 4 wherein the step of producing the integrated circuit radio frequency transceiver includes producing transceivers with the unshorted resistive block having at least two shorts removed.

6. The method of claim 2 further including determining whether to increase a resistance value of the unshorted resistive block of the second trace.

7. The method of claim 1 wherein the step of removing the short across at least one shorted resistor of the resistive block includes removing shorts across resistors that result in two resistors being coupled in series.

8. The method of claim 1 wherein the step of removing the short across at least one shorted resistor of the resistive block includes removing shorts across resistors that result in two resistors being coupled in parallel.

9. A method for forming an integrated circuit radio frequency transceiver with reduced harmonic interference from undesired coupling, comprising:

producing a sample of the integrated circuit radio frequency transceiver, the step of

5 producing the sample further including:

forming a plurality of traces on a top metal layer; and

forming a shorted resistive block in line with at least one trace of the plurality of traces

10 wherein the resistive block includes a plurality of series coupled resistors, each resistor of the plurality of series coupled resistors having a short across the resistor;

evaluating real performance of the sample of the integrated circuit radio frequency transceiver;

15 determining whether harmonic interference may need to be reduced;

selecting and removing a first short across a first resistor of the plurality of series coupled resistors to create an RC filter resulting from a coupling of parasitic capacitance of the trace and an unshorted first resistor; and

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producing the integrated circuit radio frequency transceiver with the unshorted first resistor.

10. The method of claim 9 further including evaluating real performance of the sample with the unshorted first resistor.

11. The method of claim 10 wherein the unshorted first resistor is physically closest to an end
5 of the at least one trace.

12. The method of claim 10 further including removing a short across a shorted second resistor to form an unshorted second resistor wherein the unshorted second resistor is coupled in series with the unshorted first resistor.

10 13. The method of claim 12 wherein the step of producing the integrated circuit radio frequency transceiver includes producing the integrated circuit radio frequency transceiver with the unshorted first and second resistors.

15 14. The method of claim 10 further including determining whether to increase a resistance value of the at least one trace by removing a short across a third resistor coupled in series with the first and second resistors of the at least one trace.

15. A method for forming an integrated circuit radio frequency transceiver with reduced harmonic from undesired coupling, comprising:

producing a sample of the integrated circuit radio frequency transceiver, the step of

5 producing the sample further including:

forming a plurality of traces on a top metal layer; and

forming a shorted resistive block in line with at least one trace of the plurality of traces

10 wherein the resistive block includes a plurality of parallel coupled resistors wherein a short is coupled across the parallel coupled resistors of the resistive block ;

evaluating real performance of the sample of the integrated circuit radio frequency transceiver;

15 determining whether harmonic interference may need to be reduced;

selecting and removing the short across the parallel coupled resistors of the resistive block to create an RC filter resulting from a coupling of parasitic capacitance of the trace and unshorted parallel coupled resistors; and

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producing the integrated circuit radio frequency transceiver with the unshorted parallel coupled resistors.

16. The method of claim 15 further including evaluating real performance of the sample with the unshorted parallel coupled resistors.

17. The method of claim 16 further including removing a first resistor of the parallel coupled
5 resistors to increase the resistance of an unshorted resistive block.

18. The method of claim 17 wherein the step of producing the integrated circuit radio frequency transceiver includes producing the integrated circuit radio frequency transceiver with the unshorted resistive block with at least one removed resistor.

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19. The method of claim 18 further including determining whether to increase a resistance value of the resistive block by removing a second resistor coupled in parallel within the resistive block.

20. An integrated circuit radio transceiver, comprising:

front end transceiver circuitry for receiving and transmitting wireless communication signals

wherein the front end transceiver front-end processes received RF signals and converts the

5 processed signals to digital signals and converts outgoing digital signals to analog and

upconverts the outgoing analog signals to RF and amplifies outgoing RF signals;

wherein the front end transceiver circuitry includes a plurality of traces on a top metal layer; and

10 a shorted resistive block in line with at least one trace of the plurality of traces wherein the
resistive block includes a plurality of parallel coupled resistors and wherein a short is coupled
across the parallel coupled resistors of the resistive block.

21. An integrated circuit radio transceiver, comprising:

front end transceiver circuitry for receiving and transmitting wireless communication signals

wherein the front end transceiver front-end processes received RF signals and converts the

5 processed signals to digital signals and converts outgoing digital signals to analog and

upconverts the outgoing analog signals to RF and amplifies outgoing RF signals;

wherein the front end transceiver circuitry includes a plurality of traces on a top metal layer; and

10 a shorted resistive block in line with at least one trace of the plurality of traces wherein the

resistive block includes a plurality of series coupled resistors and wherein a short is coupled

across each resistor of the series coupled resistors of the resistive block .